

Notice of Allowability**Application No.**

10/604,705

Applicant(s)

MAREN ET AL.

Examiner

Art Unit

Khanh B. Pham

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to amendment filed 6/7/2007.
2. The allowed claim(s) is/are 39-45, 47-58, 60-73 (Re-numbered as 1-33).
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application
6. Interview Summary (PTO-413),
Paper No./Mail Date 20070815.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with Mr. Trevor Coddington on August 15, 2007.

The application has been amended as follows:

The title:

The title has been replaced with the new title as follows:

**KNOWLEDGE DISCOVERY METHOD WITH UTILITY FUNCTIONS AND
FEEDBACK LOOPS**

In the claims:

Claims 39, 51-53 have been amended as follows:

39. (Currently Amended) A method for performing knowledge discovery comprising the steps of:

associating with each member of a data corpus one or more metatags through execution of a ranking function, wherein said ranking function is controllable through a parameter value;

selecting a first subset of members from said data corpus whose associated metatags are a match to a first set of criteria;

processing said first subset of members to produce a set of pairwise associations between elements of each of said first subset of members;

selecting a subset of said set of pairwise associations that reach a certain predefined or preset value;

identifying a second subset of members from said data corpus based on said subset of said pairwise associations;

computing a utility function to measure a utility ~~associated with~~ of said second subset of members;

adjusting said parameter value to an adjusted parameter value based on said utility function;

associating one or more members of said data corpus with one or more retrospective metatags through execution of said ranking function controlled by said adjusted parameter value; and

selecting a third subset of members from said data corpus whose associated metatags are a match to a second set of criteria.

51. (Currently Amended) A method for performing knowledge discovery, the method comprising the steps of:

determining a first degree of correlation among a data corpus;

metatagging members of said data corpus with metatags according to a metatagging scheme, wherein said metatagging scheme employs a first level of knowledge representation for said first degree of correlation and employs at least a second level of knowledge representation for a second degree of correlation among data, wherein said step of indexing metatagging is controllable through a parameter value, and wherein said first and second levels of knowledge representation are representative of different degrees of correlation among data;

determining said second degree of correlation among a first subset of said data corpus;

identifying a second subset of members from said data corpus based on said second degree of correlation among said first subset of said data corpus;

computing a utility function to measure a utility of said second subset of members;

adjusting said parameter value to an adjusted parameter value based on said utility function;

remetatagging said members of said data corpus with metatags according to said metatagging scheme, wherein said step of remetatagging is controlled through said adjusted parameter value [[.]] and;

selecting a third subset of members from said data corpus whose associated metatags are a match to a first set of criteria.

52. (Currently Amended) The method of claim 51, further comprising the step of selecting said first subset of members from said data corpus whose metatags are a match to a second set of criteria.

53. (Currently Amended) The method of claim 52, further comprising the step of selecting a second subset of said data corpus whose metatags are a match to said second set of criteria.

Allowable Subject Matter

2. Claims 39-45, 47-58, 60-73 are allowed. (Re-numbered as 1-33)

3. The following is an examiner's statement of reasons for allowance:

Prior art of record does not teach the combination of claimed element including the step of computing a utility function to measure a utility of said second subset, adjusting said parameter value to an adjusted parameter value based on said utility function and associating one or more members of said data corpus with one or more retrospective metatags, which is controlled by said adjusted parameter value as recited in independent claims 39 and 51. Dependent claims are also allowed at least by virtue of their dependency to the respective independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khanh B. Pham
Primary Examiner
Art Unit 2166

August 17, 2007

